

Patent claims

1. A fastening element, to be precise a wheel nut,
having a nut body with a widened radial collar and a
5 thrust washer which is held rotatably and captively on
the nut body by a locking means, and having a cap
arranged on the nut body, wherein the thrust washer
(13) and the cap (14) are held jointly on the nut body
(11) by the locking means (16).

10

2. A fastening element having a body with a
widened radial collar and a thrust washer which is held
rotatably and captively on the body by a locking means,
and having a cap arranged on the body, wherein the
15 thrust washer (13') and the cap (14') are held jointly
on the body (11') by the locking means (16').

3. The fastening element as claimed in claim 1 or
2, wherein the locking means (16, 16') is designed as
20 an edge (17, 17') which runs around on the thrust
washer (13, 13') and which engages both over the collar
(12, 12') and over a flange (18, 18') formed at the
free end of the cap (14, 14').

25 4. The fastening element as claimed in claim 1 or
2, wherein a free region (23, 23') at the edge (17,
17') is provided, which can be oriented radially inward
after the assembly of the three components, body (11,
11'), thrust washer (13, 13') and cap (14, 14').

30

5. The fastening element as claimed in claim 4,
wherein the free region (23, 23') of the edge (17, 17')
can be oriented radially inward by means of a beading
method.

35

6. The fastening element as claimed in claim 1 or
2, wherein the flange (18, 18') of the cap (14, 14')
lies on the collar (12, 12') of the body (11, 11').

7. The fastening element as claimed in claim 1 or 2, wherein, above the collar (12, 12'), the body (11, 11') has a step-shaped shoulder (19, 19') running around, and wherein the cap (14, 14') is provided, 5 above the flange (18, 18'), with a step (20, 20') adapted to the shape of the shoulder (19, 19').

8. The fastening element as claimed in claim 1 or 2, wherein, with the fastening element assembled, the 10 free region (23, 23') of the edge (17, 17') and the thrust washer (13, 13') is contiguous, flush and in a leaktight manner, to the step (20, 20') formed on the cap (14, 14').

15 9. The fastening element as claimed in claim 1 or 2, wherein the cap (14, 14') sits on the body (11, 11') by means of a press fit.

10. The fastening element as claimed in claim 1 20 or 2, wherein at least one of the surfaces (27, 28; 27', 28') of the body (11, 11') and of the thrust washer (13, 13') which lie on one another is provided with a central recess (21, 21') running around, in such a way that the body (11, 11') and the thrust washer 25 (13, 13') lie on one another only in their outer radial region.

11. The fastening element as claimed in claim 1 or 2, wherein a sealing means is provided between the 30 locking means (16, 16') and the collar (12, 12') and the cap (14, 14').

12. The fastening element as claimed in claim 11, wherein the sealing means is provided between the free 35 region (23, 23') of the edge (17, 17') of the thrust washer (13, 13') and the collar (12, 12') or the flange (18, 18') of the cap (14, 14').

13. The fastening element as claimed in claim 10,
wherein the sealing means is a sealing ring (22, 22')
or a sealing washer which is arranged between the
flange (18, 18') of the cap (14, 14'), said flange
5 lying on the collar (12, 12') of the body (11, 11'),
and the radially inward-oriented free region (23, 23')
of the edge (17, 17') of the thrust washer (13, 13').

14. The fastening element as claimed in claim 2,
10 to be precise a wheel screw.

15. The fastening element as claimed in claim 11,
wherein the sealing means is a sealing ring (22, 22')
or a sealing washer which is arranged between the
15 flange (18, 18') of the cap (14, 14'), said flange
lying on the collar (12, 12') of the body (11, 11'),
and the radially inward-oriented free region (23, 23')
of the edge (17, 17') of the thrust washer (13, 13').